

CHAPTER 2

LITERATURE REVIEW

A. Theoretical Review

1. Vocabulary Acquisition

a. The Importance of Vocabulary in Language Learning

Vocabulary has increasingly been recognized as a central component of language proficiency in contemporary SLA research. Recent studies emphasize that vocabulary knowledge plays a crucial role in communicative competence, particularly in speaking ability. Uchihara & Clenton (2023) found that spoken productive vocabulary knowledge strongly predicts second language speaking proficiency, including fluency and lexical richness, suggesting that vocabulary mastery directly influences learners' ability to communicate effectively in real-time situations. Likewise, Teng (2024) highlights the importance of self-regulated vocabulary learning in supporting long-term vocabulary growth, demonstrating that autonomous vocabulary development contributes significantly to overall language achievement. These recent findings reinforce the contemporary view that vocabulary remains a foundational element in modern language learning frameworks, both inside and outside the classroom.

Earlier scholars have also emphasized the essential role of vocabulary in language development. Nation (2001) asserts that vocabulary knowledge supports the development of listening, speaking, reading, and writing, forming the basis for meaningful communication. Wilkins (1972) famously states, "without grammar very little can be conveyed, without vocabulary nothing can be conveyed," indicating that vocabulary determines the extent to which learners can express and interpret meaning. Schmitt (2010) similarly argues that vocabulary acquisition is central to linguistic competence because lexical items carry the core semantic information required for communication. Therefore, vocabulary mastery

is not only fundamental for general language proficiency but also essential for academic success and participation in real-world communicative contexts.

b. Theories of Vocabulary Acquisition

Vocabulary learning has been widely explained by several theoretical frameworks. Krashen (1985) Input Hypothesis proposes that vocabulary is acquired when learners receive comprehensible input slightly above their current proficiency level ($i+1$). MMORPGs support this process by exposing learners to contextualized and meaningful language through quests, instructions, and communication. Schmidt (1990) Noticing Hypothesis argues that noticing is a prerequisite for acquisition and that learners must consciously attend to new lexical forms for them to enter long-term memory. MMORPG gameplay requires real-time processing, forcing players to notice unfamiliar vocabulary, especially when task success depends on it. Laufer & Hulstijn (2001) Involvement Load Hypothesis suggests that vocabulary retention increases when learning tasks include a high degree of cognitive involvement, particularly through need, search, and evaluation. Tasks in MMORPGs often require players to search for information, evaluate meanings, and respond strategically, leading to deeper processing of vocabulary.

c. Intentional vs. Incidental Vocabulary Learning

Vocabulary acquisition occurs through intentional learning, which involves deliberate study, repetition, or dictionary usage, and incidental learning, which occurs unintentionally through exposure to language in context (Nation, 2001). Hulstijn (2003) explains that incidental vocabulary learning is more effective for long-term retention because contextual engagement promotes deeper processing. Research by Webb (2008) also indicates that exposure to vocabulary across multiple contexts increases retention and productive use. MMORPGs strongly support incidental learning through repetitive exposure within meaningful tasks, peer interaction, and authentic problem-solving. However, intentional learning

also takes place when players actively look up definitions or ask peers for clarification. Therefore, MMORPGs combine the strengths of both approaches by providing implicit exposure and opportunities for strategic reflection.

d. Factors Affecting Vocabulary Acquisition

Vocabulary learning is influenced by factors such as frequency, context richness, multimodality, motivation, and exposure duration. Schmitt (2010) states that frequent encounters with a word significantly increase retention. In MMORPGs, repeated commands, quest terms, and in-game functional vocabulary appear continuously, strengthening memory. Context also plays a vital role: Webb (2007) argues that contextual cues improve comprehension and support semantic inference. Motivation is another major factor; Dörnyei (2005) explains that motivation drives persistence, attention, and learning effort. Because MMORPGs are highly motivating, learners willingly engage in challenging linguistic tasks. Learner characteristics such as gaming experience and language proficiency additionally shape vocabulary acquisition (Taguchi, 2007). Thus, MMORPG environments provide optimal vocabulary learning conditions through rich exposure, meaningful interaction, and motivational engagement.

2. Digital Games and Language Learning

a. Game-Based Learning Theory

Game-Based Learning (GBL) theory suggests that learning becomes more effective when activities are interactive, engaging, and goal-oriented (McGonigal, 2011). Gee (2003) argues that well-designed games embed powerful learning principles such as problem-solving, collaboration, situated meaning, and immediate feedback. Prensky (2001) also highlights that digital games improve motivation and attention by transforming learning into enjoyable experiences. Research by Chen & Yang (2013) found that language learners participating in online gaming environments

improve vocabulary acquisition and communication skills significantly compared to traditional classroom learning. Because games provide realistic contexts and social participation, they align with constructivist learning theory, which views knowledge as constructed through active engagement.

b. Digital Games for Language Learning (DGLL)

The use of digital games in language education has increased rapidly due to their potential to enhance linguistic competence and learner autonomy. According to Reinders & Wattana (2015), digital games provide authentic communicative environments that promote confidence, reduce anxiety, and encourage meaningful language use. Berns et al. (2013) found that 3D virtual worlds and MMORPGs support vocabulary development and communicative competence by offering authentic interaction with native and non-native speakers. Peterson (2010) demonstrated that online games foster negotiation of meaning, turn-taking, and feedback key elements in SLA. These findings illustrate how digital games serve as complementary tools that extend language learning beyond classroom boundaries.

c. Affordances of Digital Games for Vocabulary Learning

Digital games afford unique learning opportunities such as contextual learning, multimodal input, repetition, interaction, and authentic communication. Sykes & Reinhardt (2013) argue that digital games provide meaningful contexts that support learning through embodied experiences rather than rote memorization. Multimodal presentation enhances memory through dual-coding mechanisms (Paivio, 2014). Repetition in games strengthens retention, and synchronous interaction accelerates vocabulary internalization. As Peterson (2010) notes, digital play promotes real-time communication that mirrors real-world language use, enabling learners to develop automaticity and pragmatic competence.

3. MMORPGs as Language Learning Environments

a. Characteristics of MMORPGs

Massively Multiplayer Online Role-Playing Games (MMORPGs) are large-scale online games in which thousands of players interact synchronously in persistent virtual environments. These games combine role-playing mechanics, complex narrative systems, and collaborative tasks that require real-time communication and decision-making. According to Wu et al. (2014), MMORPGs are characterized by a continuous world that remains active even when players are offline, allowing ongoing social interaction and community formation. The gameplay typically involves quest systems, mission-based progression, and task completion, which require players to engage with extensive in-game texts such as instructions, item descriptions, dialogue, and storyline narratives (Peterson, 2010).

MMORPGs also rely heavily on multimodal communication, including text chat, voice chat, guild forums, and private messaging systems (Zhong, 2011). These channels support collaborative problem-solving and strategy coordination within teams or guilds. Rankin et al. (2008) note that the interactive nature of MMORPGs fosters natural communication exchanges similar to real-life settings, enabling meaningful linguistic participation. Additionally, players assume various social roles—such as healer, tank, or leader—which require negotiation, role distribution, persuasion, and cooperative negotiation. This social complexity allows MMORPGs to operate as communities of practice, where learning occurs through participation and shared knowledge-building (Gee, 2003). Because gameplay success depends on communication and collaboration, MMORPGs inherently encourage players to engage in authentic language use to achieve mutual objectives. As such, MMORPGs provide immersive, socially rich, and textually dense environments that mirror real-world communicative situations and create strong affordances for second language development.

b. Language Learning Opportunities in MMORPGs

MMORPGs offer extensive opportunities for language learning through authentic interaction, meaningful tasks, and exposure to rich linguistic input. The necessity to read quests, interpret dialogues, negotiate strategies, and communicate with teammates creates conditions where language learning becomes purposeful and context-driven rather than artificially structured. The communicative demands of MMORPGs transform gameplay into task-based language learning, where players must use language to solve problems, plan strategies, and complete missions. Peterson (2010) states that in-game interaction promotes pragmatic competence and discourse skills through turn-taking, clarifying misunderstandings, and offering feedback. Additionally, MMORPGs engage learners in meaning-focused input and output, which aligns with Nation (2001) four strands of language learning. MMORPGs also expose learners to multimodal input (audio, visual, and textual cues) that supports deeper encoding and vocabulary retention.

Furthermore, MMORPGs foster high motivation and reduced anxiety, leading to greater language learning success. Reinders & Wattana (2015) found that students engaging in online gameplay showed increased willingness to communicate (WTC) and confidence in language use because games offer low-risk environments where errors do not carry academic consequences. MMORPGs also support learner autonomy, enabling learners to control their pace, goals, and strategies (Sundqvist & Sylvén, 2014). Through community participation, players engage in authentic transnational communication, functioning within global networks of English speakers. Thus, MMORPGs not only provide abundant linguistic input but also create meaningful real-world interaction that fosters vocabulary acquisition, communicative competence, and long-term language development.

4. Theoretical Frameworks Underpinning the Study

This study draws upon several learning theories originally developed within the field of Second Language Acquisition (SLA) but applied here to the context of English as a Foreign Language (EFL) learning. These frameworks help explain how EFL learners acquire English vocabulary through digital environments such as MMORPGs, where authentic communication and contextual interaction occur.

a. Krashen's Input Hypothesis

Input Hypothesis from Krashen (1985) is one of the most influential frameworks in language learning theory and remains relevant for understanding how EFL learners acquire vocabulary. It emphasizes that learners progress when they receive comprehensible and meaningful input slightly above their current level of competence ($i+1$). In the context of MMORPGs, players are continuously exposed to English through quests, mission dialogues, and player interactions that require understanding and responding appropriately to progress in the game. This exposure provides natural, meaningful input that aligns with Krashen's concept of language learning through communication rather than explicit instruction.

b. Oxford's Language Learning Strategies Theory

Oxford (1990) *Language Learning Strategies Theory* identifies cognitive, metacognitive, and social strategies that EFL learners use to process and retain new language input. These strategies support autonomy and self-regulation. In MMORPG contexts, learners demonstrate these strategies when they use translation tools, infer meanings from context, or collaborate with peers to solve in-game challenges. Such behaviors reflect the autonomous and strategic nature of learning within virtual environments, supporting Oxford's theory that effective learners actively construct their understanding through self-regulated and socially mediated actions.

c. Vygotsky's Sociocultural Theory

Sociocultural theory (Vygotsky, 1978) provides an essential social dimension to EFL learning. It views language development as a collaborative process that occurs through communication and interaction with others. In MMORPGs, EFL learners engage in cooperative problem-solving and negotiation of meaning, reflecting the principles of sociocultural learning within virtual communities.

d. Craik and Lockhart's Depth of Processing Theory

Craik & Lockhart (1972) framework argues that retention depends on the level at which information is cognitively processed. The deeper and more meaningful the processing, the stronger the memory trace. Within MMORPGs, vocabulary encountered during meaningful tasks—such as quests, missions, and player collaboration—is processed at a deep semantic level because it is tied to immediate goals, emotions, and contextual relevance. As a result, vocabulary learned through gameplay tends to be retained longer and used more effectively in real-life communication.

In the context of MMORPGs, learners engage in cooperative gameplay, negotiation of meaning, and peer assistance, all of which exemplify sociocultural learning. Communication with international players provides authentic opportunities for language use, while the game community serves as a social space for shared meaning-making. Thus, Vygotsky's theory complements Krashen (1985) focus on input, Oxford (1990) emphasis on strategies, and Craik & Lockhart (1972) view of cognitive processing by highlighting the social and interactive nature of vocabulary learning within MMORPG environments.

Together, these theories form the conceptual framework for this study, providing a comprehensive understanding of English as a Foreign Language (EFL) vocabulary learning within MMORPG environments. They explain how input, strategy use, cognitive processing, and social interaction collectively support vocabulary acquisition in authentic and motivating digital contexts.

B. Study of the Relevant Research

Several recent studies have continued to examine the role of digital games and MMORPGs in supporting English vocabulary development and communication skills within EFL contexts. Wandana et al. (2024) conducted a literature review exploring the implementation of digital game-based language learning in developing countries. Their study revealed that digital games provide meaningful exposure to authentic language input and enhance student engagement and motivation, although challenges related to technological access and teacher readiness remain. This research is relevant to the present study as it supports the idea that digital gaming environments can function as alternative learning spaces that encourage autonomous learning outside formal classrooms.

Similarly, Salsabil et al. (2023) investigated the effects of MMORPG gameplay on students' willingness to communicate in English using a narrative inquiry approach. Their findings demonstrated that interacting with other players in MMORPG environments increased learners' confidence, reduced anxiety, and encouraged the active use of new vocabulary during in-game communication. These results align with the current study's findings that MMORPGs support affective factors and facilitate the transfer of vocabulary learning into real-life communication.

Although previous research has demonstrated the positive impact of digital games and MMORPGs on vocabulary development, motivation, and communicative confidence among EFL learners, several gaps remain evident in the existing literature. Most recent studies primarily focus on outcomes such as vocabulary improvement and willingness to communicate, rather than examining the detailed processes through which vocabulary is acquired during gameplay. In addition, many existing investigations employ quantitative or perception-based survey methods, which provide limited insight into how learners actually interact with language and construct meaning within MMORPG environments. Wandana et al. (2024) also emphasize the potential of extramural digital learning contexts, yet research exploring real-world MMORPG gameplay specifically in Indonesian EFL settings remains scarce. Moreover, little attention has been given to the role of self-

regulated learning strategies and the transfer of vocabulary from in-game contexts to real-life social communication. Therefore, this study addresses these gaps by employing a qualitative case study approach to explore how vocabulary is acquired through authentic MMORPG gameplay, focusing on the learning processes, strategies, and real-world application of newly acquired vocabulary.